

REMARKS

The Office Action dated June 16, 2009, has been received and carefully noted. The above amendments to the claims, and the following remarks, are submitted as a full and complete response thereto.

By this Response, claim 1 has been amended to more particularly point and distinctly claim the subject matter of the present invention. No new matter has been added. Support for these amendments may be found in the specification, for example, at page 12, line 18, to page 13, line 15. Claims 1-9 are pending in the application, of which claim 1 is an independent claim. Claim 4 has been withdrawn from consideration. Applicants respectfully submit claims 1-3 and 5-9 for consideration.

In view of the above amendments and the following remarks, Applicants respectfully request reconsideration and timely withdrawal of the pending rejections to the claims for the reasons discussed below.

As a preliminary matter, both the present Office Action and the previous Office Action dated September 16, 2008, failed to acknowledge Applicants' claims for foreign priority (*see* Office Action at Office Action Summary, item 12, and previous Office Action dated September 16, 2008, at Office Action Summary, item 12). The claims for foreign priority were made in the Supplemental Application Data Sheet at page 3, were acknowledged in the Filing Receipt at page 1, and were highlighted in the previous Response dated December 16, 2008, at page 4, fourth paragraph. Accordingly, Applicants contacted the Office and emphasized the request in the previous Response that

the Office acknowledge the claims for foreign priority. The Office agreed that there was no acknowledgement of the claim for foreign priority, and asserted that acknowledgement would be made in the next Office Action or in the Notice of Allowance. Thus, Applicants respectfully request that the Office acknowledge the claims for foreign priority, as previously indicated.

In another preliminary matter, both the present Office Action and the previous Office Action dated September 16, 2008, failed to indicate whether the drawings are accepted (*see* Office Action at Office Action Summary, item 10, and previous Office Action dated September 16, 2008, at Office Action Summary, item 10). The drawings were filed on July 25, 2006, and this filing was acknowledged in the Notice of Acceptance of Application Under 35 U.S.C. 371 and 37 C.F.R. 1.495 at page 2. Accordingly, Applicants respectfully request that the Office indicate whether the drawings were accepted in the next Office Action or in the Notice of Allowance.

Interview Summary

Both Applicants and the undersigned respectfully thank the Examiner for conducting a telephonic interview on July 14, 2009. The following comments are submitted in view of the Examiner interview of July 14, 2009. If the Examiner has further questions and/or concerns, the Examiner is respectfully requested to contact the undersigned.

Claim Rejection - 35 U.S.C. 102/103

Claims 1-3 and 5-7 were rejected under 35 U.S.C. 102(b) as allegedly being anticipated by, or in the alternative, under 35 U.S.C. 103(a) as allegedly being obvious over Furuno (U.S. Patent No. 4,504,324). Applicants respectfully submit that each of these claims recites subject matter that is neither disclosed nor suggested in Furuno.

Independent claim 1, upon which claims 2-3 and 5-9 depend, is directed to a surface treatment method for treating a surface of a metal material by heating said metal material. The surface treatment method includes removing a passive film, where the removing comprises heating together said metal material and an amino resin. The heating decomposes the amino resin.

Furuno describes removing a spontaneously-formed oxide film on a treated aluminum plate by dipping the plate in a 7% aqueous sodium hydroxide solution at 55° C. for 3 minutes. After several more steps, the plate is then electrodeposited by using an electrodeposition bath of water soluble acryl melamine resin and passing a direct current at 30° C. for 2.5 minutes. The electrodeposition is a coating to cover the plate. Thereafter, the plate is baked at 190° C. for 30 minutes to obtain the coated plate (*see* Furuno at column 6, lines 65-68, and column 7, line 60, to column 8, line 11).

However, Furuno fails to disclose or suggest, at least, “wherein the heating decomposes the amino resin,” as recited in independent claim 1. The Office Action asserted that the oxide film of Furuno corresponds to the passive film of the present invention (*see* Office Action at page 3, second paragraph). The Office Action also

alleged that the electrodepositing and the baking of Furuno correspond to the heating of the present invention (*see* Office Action at page 3, second and third paragraphs).

Contrary to the assertions of the Office Action, the electrodepositing and the baking of Furuno cannot correspond to the heating of the present invention since Furuno fails to disclose or suggest that the electrodepositing and the baking decomposes the resin. Instead, Furuno describes the complete opposite of this, specifically referring to the electrodepositing and the baking causing the resin to be electrodeposited on the plate, or to be the coating that covers the plate (*see* Furuno at column 6, lines 65-68, and column 7, line 60, to column 8, line 11). Accordingly, Furuno does not disclose or suggest, at least, “wherein the heating decomposes the amino resin,” as recited in independent claim 1. Since Furuno fails to disclose or suggest these features of the present invention, Furuno cannot achieve advantages of the present invention, which include the decomposed resin attacking the passive film to better remove the passive film and being combusted to leave no toxins in the work environment (*see* Specification at page 12, line 18, to page 13, line 15).

For at least the reasons discussed above, Applicants respectfully submit that Furuno fails to disclose or suggest all of the features of independent claim 1. Accordingly, Applicants respectfully request that the rejection of independent claim 1 be withdrawn.

Claims 2-3 and 5-7 depend from, and further limit, claim 1. Thus, each of claims 2-3 and 5-7 recites subject matter that is neither disclosed nor suggested in Furuno. It is, therefore, respectfully requested that the rejections of claims 2-3 and 5-7 be withdrawn.

Reconsideration and allowance of claims 1-3 and 5-7 are, thus, respectfully requested.

Claim Rejection - 35 U.S.C. 103

Claims 8-9 were rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over Furuno in view of Gredelj ("Characterization of aluminum surfaces with and without plasma nitriding by X-ray photoelectron spectroscopy"). The Office Action took the position that Furuno discloses or suggests all of the features of these claims, except for nitriding or carburizing being performed. The Office Action then cited Gredelj to remedy the deficiencies of Furuno. Applicants respectfully submit that each of claims 8-9 recites subject matter that is neither disclosed nor suggested in the combination of Furuno and Gredelj.

Furuno is outlined above. Gredelj describes that plasma hardening is used in surface hardening of steels. Plasma hardening can also be used for surface hardening of aluminum if a native aluminum oxide layer present on its surface can be removed by a pretreatment (*see* Gredelj at page 240, column 2).

Applicants respectfully submit that each of claims 8-9 recites subject matter that is neither disclosed nor suggested in the combination of Furuno and Gredelj. Claims 8-9

depend from, and further limit, claim 1. As discussed above, Furuno fails to disclose or suggest all of the features of claim 1. In addition, Gredelj does not cure the deficiencies of Furuno, as Gredelj fails to disclose or suggest, at least, “wherein the heating decomposes the amino resin,” as recited in claim 1. Accordingly, Applicants respectfully submit that the combination of Furuno and Gredelj does not disclose or suggest all of the features of claims 8-9, and respectfully request that this rejection be withdrawn.

Reconsideration and allowance of claims 8-9 are, thus, respectfully requested.

Conclusion

For the reasons set forth above, it is respectfully submitted that each of claims 1-3 and 5-9 recites subject matter that is neither disclosed nor suggested in the cited references. It is, thus, respectfully requested that all of claims 1-9 be allowed, and that this application be passed to issuance.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, Applicants’ undersigned representative at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper is not being timely filed, Applicants respectfully petition for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,



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